

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON D.C., 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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MEMORANDUM

BEAD Response to Selected Sulfuryl fluoride (ProFumeTM) Comments **SUBJECT:**

Submitted By the Fluoride Action Network Pesticide Project (D 316797)

FROM:

Jonathan Becker, Senior Science Advisor William Chism, Senior Agronomist Colwell Cook, Entomologist Col Cook

Biological Analysis Branch

Biological and Economic Analysis Division (7503C)

THRU:

Arnet Jones, Chief

Biological Analysis Branch

Biological and Economic Analysis Division (7503C)

TO:

Daniel Kenny

Insecticide and Rodenticide Branch Registration Division (7505C)

Peer Review Date:

May 25, 2005

PURPOSE:

The Registration Division (RD) asked the Biological and Economic Analysis Division (BEAD) to answer four comments submitted by the Fluoride Action Network (FAN) dated April 19, 2005 in response to the Dow AgroSciences petition to establish sulfuryl fluoride tolerances for a number of new raw and processed foods.

QUESTIONS AND ANSWERS:

3.3.3 Dow states, "Most of the finished food products were fumigated in their retail packaging." What is the estimated quantity of the packaging to be fumigated with sulfuryl fluoride on a yearly basis?

Sulfuryl fluoride is intended to be used as a methyl bromide alternative that is used to target pests in commodities and food processing facilities. Based on information received by applications for methyl bromide critical uses exemptions, discussions with the manufacturer of sulfuryl fluoride, food processors, and university researchers BEAD has estimated that approximately 1 percent of processed foods could be fumigated with methyl bromide per year.

Therefore, BEAD believes that 1 percent of processed foods is the upper bound of what could be fumigated with sulfuryl fluoride. This is estimated using the following assumptions:

- Most food processing plants strive to operate continuously (year round, 24 hours per day, seven days a week). Some production down-time occurs because of equipment maintenance and repair and fumigations, so we assume that 300 days of production occurs annually.
- An average of 2.5 furnigations occurs in each facility during the year. These furnigations are usually timed to take place over holiday weekends.
- If we assume 3 fumigations occur for every 300 days of production, we estimate that 1 percent of the annual production will be fumigated.

This estimate includes food exposed while in the food processing facility as well as packaged food products stored within the same facility.

3.3.4 What percentage of this packaging will be incinerated on a yearly basis?

BEAD has no knowledge of the amount of food packing that is incinerated every year. However, a maximum of about 1% of packaging would be possibly fumigated. EPA's Office of Solid Waste may have information on the components within various industrials and household wastestreams and their ultimate destinations.

3.4 Are there any circumstances that EPA knows of when food commodities can be fumigated more than once with sulfuryl fluoride? If so, would EPA please explain.

A second furnigation may take place due to a pest infestation at a regional distribution warehouse. BEAD has estimated above that approximately 1 percent of processed foods could be furnigated once, based on information from applications for methyl bromide critical uses exemptions, discussions with the manufacturer of sulfuryl fluoride, food processors, and university researchers. This estimate includes food exposed while in the food processing facility as well as packaged food products. In addition, BEAD estimates that 0.0005% of processed foods in packages could be furnigated twice (about 5% of 1% furnigated products could be furnigated twice or 0.0005% of foods). In the case of a distribution warehouse only the suspected products would be removed to a trailer for targeted furnigation. Other chemicals may be used for these furnigations.

Cocoa beans imported into the United States are usually fumigated twice, once before shipment and a second time in the port of entry warehouses before being sent to the customer.

3.11 Would EPA please explain to the public why sulfuryl fluoride will not be an ozone depleter. Also, will EPA make accessible the atmospheric test protocol for sulfuryl fluoride.

BEAD is not involved in the determination of ozone depleting potential. Please refer to the EPA websites: http://www.epa.gov/docs/ozone/ods.html for a list of ozone depleting substances and to http://www.epa.gov/docs/ozone/index.html for more information about ozone depletion.

DP #: (316797) Decision #: 305993

DATA PACKAGE BEAN SHEET

Date: 20-Jun-2005
Page 1 of 1

* * * Registration Information * * *

Registration: 3F6573 -

Company: 62719 - DOW AGROSCIENCES LLC

Risk Manager: RM 01 - Daniel Kenny - (703) 305-7546 Room# CM-2 229

Risk Manager Reviewer: Daniel Kenny DKENNY

Sent Date: 10-Apr-2003 Calculated Due Date: 27-Nov-2003 Edited Due Date:

Type of Registration: Toterance Petition

Action Desc: (230) F PETITION; RAW AGRICULTURAL COMMODITY;

Ingredients: 078003, Sulfuryl fluoride

* * * Data Package Information * * *

Expedite: Yes No Date Sent: 11-May-2005 Due Back:

DP Ingredient: 078003, Sulfuryl fluoride

DP Title: Profume - Comments to Notice of Filing

CSF Included: ∀es ● No Label Included: Yes ● No Parent DP #:

Assigned To Date In Date Out

Organization: BEAD / HIB 12-May-2005 14-Jun-2005 Last Possible Science Due Date: 20-Jun-2003

Team Name: Science Due Date:

Reviewer Name: Chism, William 12-May-2005 14-Jun-2005 Sub-Data Package Due Date:

Contractor Name:

* * * Studies Sent for Review * * *

* * * Additional Data Package for this Decision * * *

* * * Data Package Instructions * * *

Attn: Bill Chism/Jonathan Becker

Attached is a printed copy of FAN's comments and objections to the Notice of Filing for sulfuryl fluoride on food handling establishments. I have highlighted the comments that we need BEAD's help to respond to (comments 3.3.3, 3.3.5, 3.4, 3.11, and any others that you would like to provide input on). Anything you can provide to help us respond would be most appreciated. If you have any questions or concerns, please feel free to contact Meredith Laws or myself. Thanks.

⁻ Dan Kenny 305-7546



R137669

Chemical: Sulfuryl fluoride

PC Code: 078003

HED File Code: 71300 BEAD Response to Comments

Memo Date: 6/14/2005 File ID: DPD316797 Accession #: 000-00-0116

HED Records Reference Center 1/8/2007